

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

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Listing of Claims:

Claim 1 (currently amended): A method for optimizing a playout delay of packets being transmitted within a network, said packets comprising data for playout, said network having a network delay of packet transmission, the method comprising:

10 (a) detecting a packet communication mode, wherein packet communication modes comprise a full-duplex mode and a half-duplex mode;

(b) calculating a playout delay for a current packet based on the detected packet communication mode and the playout delays of previous packets; and

(c) delaying playout of the current packet by the calculated playout delay.

15 Claim 2 (original): The method of claim 1 wherein in (b) when the packet communication mode is detected to be the half-duplex mode, the calculated playout delay for the current packet is longer than when the packet communication mode is detected to be the full-duplex mode.

Claim 3 (original): The method of claim 1 further comprising:

20 (d) calculating a mean network delay variance for the current packet; and

(e) determining an estimated jitter for the current packet referencing the mean network delay variance;

wherein in (b) the playout delay for the current packet is calculated further based on the estimated jitter for the current packet and playout delays of previous packets.

5 Claim 4 (currently amended): The method of claim 3 wherein in (b) when the packet communication mode is detected to be the half-duplex mode, the calculated playout delay for the current packet depends ~~less~~ more on the playout delays of the previous packets than when the packet communication mode is detected to be the full-duplex mode.

10 Claim 5 (currently amended): The method of claim 3 wherein in (b) when the packet communication mode is detected to be the half-duplex mode, the calculated playout delay for the current packet depends ~~more~~ less on the estimated jitter for the current packet than when the packet communication mode is detected to be the full-duplex mode.

15 Claim 6 (original): The method of claim 3 wherein the estimated jitter for the current packet as determined in (e) further depends on a scaling factor that is set according to the packet communication mode as detected in (a).

Claim 7 (original): The method of claim 3 wherein calculating a playout delay for the current packet in (b) further references a smoothing factor that is set according to the packet communication mode as detected in (a).

20 Claim 8 (original): The method of claim 1 wherein the playout of the packets is for a voice over Internet protocol (VoIP), videophone, on-line game, and other real-time interactive communication.

Claim 9 (original): The method of claim 1 wherein the network is a computer network or a radio transmission network for wireless phones.

Claim 10 (currently amended): A communications device for playing data contained in packets with an optimized delay, said packets comprising data for playout, said network having a network delay of packet transmission, the playout device comprising:

- 5 a playout buffer for receiving and buffering packets;
- a playout controller for determining playout delays of current packets from estimated network delays, playout delays of previous packets, and a packet communication mode, and for controlling the playout buffer according to the playout delays;
- 10 a network delay estimator for calculating estimated network delays of packets and sending estimated network delays to the playout controller; and
- an active detector for detecting the packet communication mode, wherein packet communication modes comprise a full-duplex mode and a half-duplex mode.

- Claim 11 (original): The communications device of claim 10 wherein when the active
- 15 detector detects the packet communication mode is the half-duplex mode, the playout controller calculates a playout delay for a current packet as longer than when the active detector detects the packet communication mode is the full-duplex mode.

- Claim 12 (currently amended): The communications device of claim 10 wherein when the
- 20 active detector detects the packet communication mode is the half-duplex mode, the playout controller calculates a playout delay for a current packet as depending ~~less~~ more on playout delays of previous packets than when the active detector detects the packet communication mode is the full-duplex mode.

Claim 13 (currently amended): The communications device of claim 10 wherein when the active detector detects the packet communication mode is the half-duplex mode, the

playout controller calculates a playout delay for a current packet as depending ~~more~~
less on an estimated network delay for the current packet than when the active
detector detects the packet communication mode is the full-duplex mode.

Claim 14 (original): The communications device of claim 10 further comprising:

- 5 a receiver through which the playout buffer receives packets from the network;
- a media output device to which the playout buffer outputs packets;
- a media input device for receiving packets; and
- a transmitter through which the playout device sends packets to the network.

10 Claim 15 (original): The communications device of claim 10 wherein the media output
 device is a voice over Internet protocol (VoIP) player, videophone, on-line game,
 and other real-time interactive communication device.

Claim 16 (original): The communications device of claim 10 wherein the network is a
computer network or a radio transmission network for mobile phones.